Magnetism and lattice disorder in uranium intermetallics

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Uranium intermetallic systems display a wide range of magnetic behavior in the ground state, including antiferromagnetism and Kondo pairing of the *f* electrons with the conduction band. When significant disorder is introduced into the magnetic interactions, one can obtain a spin glass or a so-called "non-Fermi liquid." We will discuss aspects of how lattice disorder can create these disordered states, and consider indications from magnetic or electronic behavior that lattice disorder is important. These results will be contrasted to those from potentially well-ordered non-Fermi liquids.

Preferred session No.: 2 (Magnetism, etc.)

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Number of accompanying persons who will not attend the session: 0